

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : John R. Grassi et al.
For : **MOLD-REMOVAL CASTING METHOD AND APPARATUS**
Serial No. : UNKNOWN
Filing Date : HEREWITH
Attorney Docket No. : GISZ 2 00031

Cleveland, Ohio 44114-2518

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to Rule 37 C.F.R. § 1.98(d)(2), the applicants provide the enclosed art for consideration by the Examiner.

A copy of the disclosed documents and of the corresponding PTO-1449 Form are enclosed. Applicants submit the following comments for the references that are not in English.

European Publication No. 119 365 discloses a method of casting aluminum in which the piece, still in a hot condition, is stripped immediately after casting and placed between two chilling molds of a die defining an imprint size which is slightly smaller than the size of the mold. The two chilling molds of the die are tightly pulled against one another in order to exert on the cast piece placed between them a combined action of core pressing and superficial hammering.

The German 36 16 168 publication discloses magnesium and calcium phosphinates and refractory materials which contain anywhere from 0.3 to 5% of the magnesium or calcium phosphinate as a binder. The German patent also discloses the use of magnesium oxide, calcium oxide, dolomite, olivine, forsterite and mixtures thereof as binders for basic refractory raw materials.

The Japanese 5-169185 reference discloses a process for casting with a molding material and an inorganic binder (comprising zirconia with calcia or magnesia) with refractory power, organic binder, surface active agent and anti-foaming agent.

The French 2,614,814 reference discloses a process in the manufacture of cast parts wherein which castings that are cold or at low temperatures are pressed in die cavities of dimensions slightly less than those of the mold cavities. The process can be applied to aluminum and various alloys thereof or composite material castings produced by permanent mold or sand casting, low pressure casting, pressure casting and the like. Heterogenous structure castings with mechanical properties superior to those produced by the process disclosed in the EP 119 365 publication are obtained.

The German 32 15 809 reference discloses a plan for electrohydraulic cleaning of castings. It includes a pulsed current generator, a flexible electrical lead connecting the generator to a tool electrode, a discharge current signal generator positioned adjacent to and inductively coupled with the flexible lead and a unit for automatically maintaining the desired value of the discharge gap. The input of this unit is connected to the discharge current signal generator and the output of the unit is connected to the electrode adjustment device.

It is believed that no fees are due. However, should any fees be due, please charge any such fees to Deposit Account No. 06-0308.

Respectfully submitted,

FAY, SHARPE, FAGAN,
MINNICH & MCKEE, LLP

Date: 9 July 2003

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Roseanne Giuliani
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Subst. Form PTO-1449 APPLICANT'S(S') INFORMATION DISCLOSURE STATEMENT	Atty. Docket No.: GISZ 2 00031	Serial No.: UNKNOWN
	Applicant(s): John R. Grassi et al.	
	Filing Date: HERewith	Group: UNKNOWN

U.S. PATENT DOCUMENTS							
Initial*		Document No.	Date	Name	Class	Sub cl.	Filing Date
	AA	22,865	2/1859	Gardiner			
	AB	185,376	12/1876	Whitehouse			
	AC	381,655	4/1888	Stover			
	AD	927,495	7/1909	Custer			
	AE	1,241,867	10/1917	McMillen			
	AF	3,124,452	3/1964	Kraft			
	AG	3,540,519	11/1970	Yates			
	AH	3,620,291	11/1971	Delachapelle			
	AI	3,863,702	2/1975	Hallerberg et al.			
✓	AJ	3,958,619	5/1976	Petersen et al.			
	AK	4,222,429	9/1980	Kemp			
	AL	4,347,890	9/1982	Ailin-Pyzik et al.			
	AM	4,399,858	8/1983	Kurabe et al.			
	AN	4,548,256	10/1985	Glinn et al.			
	AO	4,607,091	8/1986	Schreiber			
	AP	4,629,708	12/1986	Alexander et al.			
	AQ	4,802,525	2/1989	Heine et al.			
	AR	5,143,665	9/1992	Clubbs et al.			
	AS	5,158,130	10/1992	Sahari			
✓	AT	5,294,648	3/1994	Smith et al.			
	AU	5,327,955	7/1994	Easwaran			
	AV	5,333,673	8/1994	Hughes			
	AW	5,439,045	8/1995	Crafton			
	AX	5,573,055	11/1996	Melling et al.			
	AY	5,725,044	3/1998	Hirokawa			
	AZ	5,738,162	4/1998	Crafton			
	BA	5,810,918	9/1998	Landis			
	BB	5,913,354	6/1999	Conroy et al.			
✓	BC	5,957,188	9/1999	Crafton			
	BD	6,139,619	10/2000	Zaretskiy et al.			
	BE	6,336,809	1/2002	Crafton et al.			
	BF	6,390,178	5/2002	Makino			

	BG	6,447,593	9/2002	Sargent et al.			
	BH	6,469,299	10/2002	Chutjian et al.			
	BI	6,547,556	4/2003	Crafton et al.			
	BJ	2002/0020511	2/2002	Crafton et al.			
	BK	2002/0104596	8/2002	Crafton et al.			
FOREIGN PATENT DOCUMENTS							
		Document No.	Date	Country	Class	Sub cl.	Transla- tion?
	BL	0 119 365	9/1987	Europe			No
	BM	36 16 168	11/1987	Germany			No
	BN	5-169185	7/1993	Japan			No
	BQ	2 614 814	11/1988	France			No
	BP	32 15 809	11/1983	Germany			No
	BQ	2 248 569 A	4/1992	Great Britain			Yes
OTHER ART							
	BR	Patent Abstracts of Japan; Publication No. 61007058; Publication Date 13-01-86					
	BS						
	BT						
Examiner:					Date Considered:		
*	EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if in conformance and not considered. Include copy of this form with next communication to applicant.						